National Institute of Environmental Health Sciences

Climate change and avian influenza

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Abstract:

This paper discusses impacts of climate change on the ecology of avian influenza viruses (AI viruses), which presumably co-evolved with migratory water birds, with virus also persisting outside the host in subarctic water bodies. Climate change would almost certainly alter bird migration, influence the AI virus transmission cycle and directly affect virus survival outside the host. The joint, net effects of these changes are rather unpredictable, but it is likely that AI virus circulation in water bird populations will continue with endless adaptation and evolution. In domestic poultry, too little is known about the direct effect of environmental factors on highly pathogenic avian influenza transmission and persistence to allow inference about the possible effect of climate change. However, possible indirect links through changes in the distribution of duck-crop farming are discussed.

Source: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2709837

Resource Description

Exposure :

weather or climate related pathway by which climate change affects health

Ecosystem Changes

Geographic Feature:

resource focuses on specific type of geography

None or Unspecified

Geographic Location:

resource focuses on specific location

Global or Unspecified

Health Impact:

specification of health effect or disease related to climate change exposure

Infectious Disease

Infectious Disease: Vectorborne Disease, Zoonotic Disease

Zoonotic Disease: Other Zoonotic Disease

Zoonotic Disease (other): avian influenza

Mitigation/Adaptation: ☑

mitigation or adaptation strategy is a focus of resource

Adaptation

Resource Type: ☑

format or standard characteristic of resource

Review

Timescale: ☑

time period studied

Time Scale Unspecified

Vulnerability/Impact Assessment: ☑

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content